

Title (en)
SEALING MEANS FOR ROTARY VALVES

Title (de)
DICHTUNG FÜR DREHVENTILE

Title (fr)
DISPOSITIF D'ETANCHEITE POUR SOUPAPES ROTATIVES

Publication
EP 0746673 A4 19951117 (EN)

Application
EP 93924434 A 19931103

Priority
• AU 9300569 W 19931103
• AU PL572992 A 19921106

Abstract (en)
[origin: WO9411619A1] A rotary valve (10) of an internal combustion engine, of the hollow cylindrical type for rotation in the bore (20) of the cylinder head of the engine, the valve (10) having oil and gas seals (17, 14) to prevent leakage of oil to the combustion chamber and leakage of gas from the combustion chamber, each gas seal being of the piston ring type and each oil seal consisting of a non-rotating annular member (17), a seal (21) between it and the bore in which the valve (10) rotates, an annular cavity (24) lying peripherally in a small radial clearance between the valve (10) and the bore (20) and extending between the gas sealing ring (14) and the seal (21) on the annular member (17), the annular member (17) having a substantially radially disposed face (18) arranged to seal slidingly against a radially disposed face (19) on the valve (10), the quality of these faces (18, 19) being such as to allow migration of oil between them but sufficient when combined with the radial depth of the faces (18, 19) to prevent oil from migrating across the entire radial depth during that period of the engine cycle where pressure in the annular cavity (24) is less than the oil pressure in a space (23) at one end of the annular member (17), a spring (22) acting on the one end of the annular member (17) to urge the radial face (18) of the annular member (17) against the radially disposed face (19) on the valve (10).

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F01L 7/024 (2013.01 - EP US); **F01L 7/16** (2013.01 - EP US); **F02B 2075/027** (2013.01 - EP US)

Citation (search report)
• [A] FR 611018 A 19260818
• See references of WO 9411619A1

Cited by
US6548623B2; US6870025B2

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